Message

From: Walker, Stuart [Walker.Stuart@epa.gov]
Sent: 7/24/2020 3:47:53 PM
To: Clements, Julie A CIV (USA) [Julie.A.Clements@usace.army.mil]
CC: Hays, David C Jr CIV USARMY CENWK (USA) [David.C.Hays@usace.army.mil]; Rankins, Jonathan E CIV USARMY CEMVS (USA) [Jonathan.E.Rankins@usace.army.mil]; Praskins, Wayne [Praskins.Wayne@epa.gov]
Subject: FW: Hunters Point
Attachments: Indoor_Worker_rad_bprg_15JUL2020_bprg24133_Secular_Equilibrium_Average.xlsx; Indoor_Worker_rad_bprg_15JUL2020_bprg31006_Secular_Equilibrium_Corner.xlsx; Indoor_Worker_rad_bprg_15JUL2020_bprg29119_Secular_Equilibrium_Center_Wall.xlsx; Indoor_Worker_rad_bprg_15JUL2020_bprg26891_Secular_Equilibrium_Center.xlsx

Hi Julie, I thought that ACE might want to include this information in their analytical paper.

For 3D/fixed contamination our discussions were focusing on a Conceptual Site Model (CSM) that assumes contamination is from spills and assumed to be on the floor and walls extending no more than 6 feet up the wall The BPRG calculator 3D option assumes contamination on all 4 walls, ceiling, and floor. To more accurately model the spill CSM, I had a modified surface factor (splash surface factor) developed to revise the BPRG 3-D results in post processing, assuming the most conservative receptor location (corner of the room) in a small (10x10x10 foot) room. In the post processing, the current isotope specific surface factors were removed from the BPRG by multiplication and the new isotope specific splash surface factors were incorporated by dividing (e.g. (BPRG x Fsurf)/Fsplash).

Below is an email from Fred with the analysis for the splash BPRGs using secular equilibrium output option. I will forward you a second email from Karessa where she did the same analysis except using the BPRG output option 2 and changing the half lives of the daughters to match the parent.

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From: Dolislager, Fredrick G. <dolislagerf1@ornl.gov>
Sent: Wednesday, July 15, 2020 1:43 PM
To: Praskins, Wayne <Praskins.Wayne@epa.gov>; Walker, Stuart <Walker.Stuart@epa.gov>
Cc: Manning, Karessa <manningkl@ornl.gov>
Subject: RE: Hunters Point

Here are the indoor worker SE results.

fred d.

From: Praskins, Wayne <Praskins.Wayne@epa.gov>
Sent: Wednesday, July 15, 2020 12:46 PM
To: Walker, Stuart <Walker.Stuart@epa.gov>; Dolislager, Fredrick G. <dolislagerf1@ornl.gov>
Cc: Manning, Karessa <manningkl@ornl.gov>
Subject: [EXTERNAL] RE: Hunters Point

I'm unclear how you propose to use these results. It would be good to talk. I'm open today 2:30 – 4 Eastern and then again at about 5:30 Eastern.

Wayne Praskins | Superfund Project Manager
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75 Hawthorne St. (SFD-7-3)
San Francisco, CA 94105
415-972-3181

From: Walker, Stuart <Walker.Stuart@epa.gov>
Sent: Wednesday, July 15, 2020 8:27 AM
To: Dolislager, Fredrick G. <dolislagerf1@ornl.gov>; Praskins, Wayne <Praskins.Wayne@epa.gov>
Cc: Manning, Karessa <manningkl@ornl.gov>
Subject: RE: Hunters Point

This looks good. I'm assuming Karessa could answer any questions that come up while Ex. 6 Personal Privacy (PP) ? Maybe we can chat for a few minutes this afternoon, I have my 3rd meeting this morning at noon, and we have 4-5 later today.

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From: Dolislager, Fredrick G. <dolislagerf1@ornl.gov>
Sent: Tuesday, July 14, 2020 5:57 PM
To: Walker, Stuart <Walker.Stuart@epa.gov>; Praskins, Wayne <Praskins.Wayne@epa.gov>
Cc: Manning, Karessa <manningkl@ornl.gov>
Subject: RE: Hunters Point

Here are all four room positions for resident. I had to clean up the first file I sent you. These are all in SE. I can do indoor worker tomorrow.

Fred Dolislager
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http://volweb.utk.edu/~dolislag/

From: Walker, Stuart <Walker.Stuart@epa.gov>
Sent: Tuesday, July 14, 2020 5:16 PM
To: Dolislager, Fredrick G. <dolislagerf1@ornl.gov>; Praskins, Wayne <Praskins.Wayne@epa.gov>
Cc: Manning, Karessa <manningkl@ornl.gov>
Subject: [EXTERNAL] RE: Hunters Point

I didn't notice anything different in the attachment, it looks like just the surface factors?

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From: Dolislager, Fredrick G. <dolislagerf1@ornl.gov>
Sent: Tuesday, July 14, 2020 4:58 PM
To: Walker, Stuart <Walker.Stuart@epa.gov>; Praskins, Wayne <Praskins.Wayne@epa.gov>
Cc: Manning, Karessa <manningkl@ornl.gov>
Subject: RE: Hunters Point

Stuart,

Karessa helped me get the attached file in shape. This is a resident run in SE mode for all isotopes. It is concrete, center of room. There is a new tab that has the new surface factors. The 3-D External BPRG Individual tab has several new columns where I post-processed the BPRG run. Column T is the default BPRG for ground plane. Column Z is where I removed the Fsurf from the BPRG. Column AA calls the new splash factors. Column AB incorporates the new splash factors (Fsurf). Column AC is just a verification of the default results.

Please review.

I will try and do the other receptor positions before I go

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From: Walker, Stuart <Walker.Stuart@epa.gov>
Sent: Tuesday, July 14, 2020 4:24 PM
To: Praskins, Wayne <Praskins.Wayne@epa.gov>
Cc: Dolislager, Fredrick G. <dolislagerf1@ornl.gov>
Subject: [EXTERNAL] FW: Hunters Point

Fyi, the surface factors. **Ex. 6 Personal Privacy (PP)**

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From: Dolislager, Fredrick G. <dolislagerf1@ornl.gov>
Sent: Tuesday, July 14, 2020 11:30 AM
To: Walker, Stuart <Walker.Stuart@epa.gov>; Samuels, Caleigh <samuelsce@ornl.gov>
Subject: FW: Hunters Point

Stuart,

Attached are the draft surface factors for contaminated floors and partial walls (6 ft). This is a 10x10x10 concrete room with surface contamination. In the file you will find 4 receptor positions. I included a little table comparing the current surface factors to the new ones. You'll notice a large difference in some low energy photon emitters such as Am-241. This is to be expected as the interactions for low energy photons are heavily dependent on the soil composition used for the baselines. We are pretty happy with the data trends, but consider this a preliminary release, please. If you need anything additionally, please communicate with Caleigh and copy me.

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